REMARKS

Proposed drawing corrections to Figs. 1, 2, 4, and 7 along with new formal drawings are enclosed. Specification amendments have been made to correct an error and include language indicating that both m and n are integers greater than 1. This is not new matter; it is clear that 8 and 4 were given only as examples and that in each case an integer greater than 1 is necessary. This same amendment has been made in claims 1, 9 and 17 to remove any indefiniteness.

Claims 1-24 remain in this application. Claims 1-3, 6, 9 and 17-19 have been rejected. The Examiner has indicated that claims 4, 5, 7, 8, 10-16 and 20-24 would be allowable if in independent form. Applicants appreciate this indication of allowability, but have not amended these claims, since, for the reasons set out in detail below, it is believed that all claims are in condition for allowance.

The Examiner has rejected claims 1 and 2 as anticipated by Paneth. Paneth is in an area of art basically unrelated to what is claimed, i.e., a modem. The only similarity is that, in one instance, oversampling takes place. As the Examiner notes, this is described in Cols. 7-8. What is occurring is that the values in the shift registers are being sampled. But, these samples are not stored in the ROM 81, or anywhere else for that matter; they are used to address memory locations (a look-up table) in the ROM, which then provides, as a output on line 89, a stored value at the location addressed. There is a series of outputs, one for each clock cycle. There is no case where the sampled values are ever output, let alone output as a number of groups (m) of samples.

That this is how the ROM operates is clear from Col.7 line 64 – Col. 8, line 9. Note the statement: "The output signals stored in the transmitter FIR filter ROM 81 ... This makes clear that the output is not groups of the samples input, but precomputed stored values that can then be converted to analog signals. (Additional information on operation and examples of these types of filters can be found by doing a web search for FIR filter ROM).

Claims 3 and 6 were rejected over Paneth in view of Yang et al. These are dependent claims including all the limitations of the claims on which they depend. Yang et al. does not make up for the deficiencies in Paneth. Thus, these claims too are allowable.

Claims 9 and 17-19 were rejected as obvious over Paneth in view of Jeong.

Again, Applicant's note that Jeong does not make up for the basic elements missing from Paneth and these claims are allowable as claims 1 and 2 are allowable.

In view of the above, Applicants submit that all claims clearly distinguish over the art and are in condition for allowance.

The Examiner is invited to call the undersigned at (202) 220-4200 to discuss any information concerning this application.

The Office is hereby authorized to charge any additional fees under 37 C.F.R. § 1.16 or § 1.17 or credit any overpayment to Deposit Account No. 11-0600.

Respectfully submitted,

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